CONTENTS INDEX - VOLUME 33

A Direct Evidence for the Involvement of Prostaglandin $F_{2\alpha}$ in the First Step of Estrone-Induced Blastocyst Implantation in the Spayed Rat. M. Oettel, M. Koch, A. Kurischko, and K. Schubert . . 2287 1

Steroid Specificity of Human Placental 5-Ene-3β-Hydroxysteroid Oxidoreductase. Nobutaka Yoshida . . 2351 9

Synthesis and Reduction of Steroid C-20 Alkylidene Cyanoacetates. P. Tsitsa, G. Tsatsas, and C. Sandris . . 2357 23

Isolation of Urinary C-20α- and C-20β-Hydroxy-C_{21}-Steroid Metabolites in Cases of Congenital Adrenal Hyperplasia, Postpubertal Virilizing Syndrome and Polycystic Ovary Syndrome. G. Halperin and I. Maschler . . 2358 33

Validation of a Specific Radioimmunoassay to Measure Plasma Cortisol in the Fetal Sheep. David M. Magyar, John E. Buster, Carlene W. Elsner, Peter W. Nathanielsz, Rene Oliveros, and Guy E. Abraham . . 2376 45

Serum Levels of Progesterone, 5α-Dihydroprogesterone and Hydroxy-5α-Pregnanones in the Prepartum and Postpartum Equine. K.W. Seamans, P.G. Harms, D.T. Atkins, and J.L. Fleeger . . 2385 55

Disposition and Metabolism of 16β-Ethyl-17β-Hydroxy-4-Estren-3-One (TSAA-291), a new Antiandrogen, in Rats. S. Tanayama, K. Yoshida, T. Kondo, and Y. Kanai . . 2387 65

Chemical Synthesis and Bioassay of Anordrin and Dinordrin I and II. Pierre Crabbé, Houda Fillion, Yves Letourneaux, Egon Diczfalusy, Ana-Rosa Aedo, Joseph W. Goldzieher, Abubakar A. Shaikh, and V. Daniel Castracane . . 2388 85

Uptake and Metabolism of Female Sex Steroids by Isolated Small Neurons and Other Cell Fractions from the Rat Medial Basal Hypothalamus. Ricardo V. Lloyd, Pamela A. Gilles, and Harry J. Karavolas . 2395. 97

Steroid Δ^4-5β-Reductase in Human Mammary Tumors. Y.J. Abul-Hajj . . 2398 115

Analysis of Progesterone in Unextracted Serum: A Method Using Danazol [17α-Pregn-4-EN-20-YNO(2,3-d) Isoxazol-17-OL] A Blocker of Steroid Binding to Proteins. Robynne McGinley and John H. Casey . 2267 . . 127

On the Regulation and Turnover of Progesterone Metabolites in Rat Uterus. Dieter Egert . . 2323 139

Heterocyclic Steroids - Part VIII: Studies on the Total Synthesis of Racemic 2-Phenyl-7-Methyl-3-OXA-A-Nor-14β-Estra-1,5(10),6,8-Tetraen-17α-OL. S.R. Ramadas and S. Padmanabhan . . 2371 153

Bile Acid Sulfates. III. Synthesis of 7- and 12-Monosulfates of Bile Acids and their Conjugates Using a Sulfur Trioxide-Triethylamine Complex. Kou-Yi Tserng and Peter D. Klein . . 2391 167

Serum Levels of Corticosterone and 18-Hydroxy-11-Deoxycorticosterone in the Female Rat at the High and Low Points of the Circadian Rhythm. Samuel Gallant . . 2399 183

Dinoflagellate Sterols I: Sterol Composition of the Dinoflagellates of *Gonyaulax* Species. M. Alam, T.B. Sansing, E.L. Busby, D.R. Martiniz, and S.M. Ray . . 2400 197

Aromatization of Androgens by Human Breast Cancer. Y.J. Abul-Hajj, R. Iverson, and D.T. Kiang . . 2410 205

In vitro Metabolism of 4-Androstene-3,17-Dione and Testosterone by Rat Submaxillary Gland. James C. Coffey, Thomas E. Harvey, and William L. Carr . . 2411 223

Direct Inhibitory Effects of Estrogens on Rat Leydig Cells *in vitro*. M.R. Sairam and M.I. Berman . . 2412 233

Steroid Synthesis. The Modified Hunsdiecker Degradation of Bile Acids and Related Compounds. Furn F. Knapp, Jr. . . 2313 245

The Production and Secretion of Cortisol by Baboon Neonates. Gerald J. Pepe . . 2396 251

Differences in Steroid Specificity for Rat Androgen Binding Protein and the Cytoplasmic Receptor. G.R. Cunningham, D.J. Tindall, and A.R. Means . . 2405 261

Selective Inhibition by Secosteroids of 5α-Reductase Activity in Human Sex Skin Fibroblasts. Nadia A. Zerhouni, Marc Maes, Charles Sultan, Stephen Rothwell, and Claude J. Migeon . . 2409 277

Lumi-Mestranol and Epi-Lumi-Mestranol. Michael P. Wachter, Richard E. Adams, Mary Lou Cotter, and Joseph A. Settepani . 2413 . 287

The Synthesis of Methyl 3α,7α-Diacetoxy-11-Oxo-5β-Cholan-24-Oate. G. Halperin . . 2414 295

Significance of Various Cholesterol Ester Hydrolases in Aorta. M.T. Ravi Subbiah . . 2417 305

The Effect of Bile Acids on "Solubilized" Cholesterol 7α-Hydroxylase Activity in Swine. Job R. Li and D.N. Kim . . 2418 317

Configurational Assignment of 5β-Cholestane-3α,7α,12α,23,25-Pentol Excreted by Patients with Cerebrotendinous Xanthomatosis (A Circular Dichroism Study). B. Dayal, G.S. Tint, S. Shefer, and G. Salen . . 2420 327

Synthesis of Iodine-131 Labeled 6β-Iodomethyl-19-Norsitost-5(10)-EN-3β-OL and 19-Iodositost-5-EN-3β-OL for Adrenal Imaging. H. Komatsu, S. Yamauchi, H. Shimoirisa, T. Ito, M. Maeda, and M. Kojima. 2423 . 339

A Sensitive Solid Phase Enzymeimmunoassay for Testosterone in Plasma and Saliva. Atilla Turkes, Aslihan O. Turkes, Brian G. Joyce, Graham F. Read, and Diana Riad-Fahmy . . 2424 347

Asymmetric Induction in Steroid Synthesis: Synthesis of D-Homoestrone Methyl Ether Using a Novel Annulation Reaction. G.V. Bhide. 2348 . 361

Mass Spectrometry and Stability of t-Butyldimethylsilylethers of some Estrogens and Androstanes. L. Ballhorn, W.F. Mueller, and F. Korte . . 2349 379

A Microassay for the Measurement of Androgen Receptors in Human Prostatic Tissue. L. Louise Hicks and Patrick C. Walsh . 2390 . . 389

Binding Properties of Testosterone Receptors in the Hypothalamic-Preoptic Area of the Adult Male Mouse Brain. C.R. Clark and N.W. Nowell . . 2397 407

The *in vitro* Metabolism of Progesterone, 4-Androstene-3,17-Dione, Testosterone and 17β-Hydroxy-5α-Androstan-3-One by Fetal Rhesus Monkey Testes. James C. Coffey and Roger E. Johnsonbaugh . 2402 . 427

An Improved Procedure for the Preparation of Rat Uterine Cell Suspensions. E. Enzio Müller and Herbert H. Wotiz . . 2422 . . . 435

Kinetic Analysis of the Placental Microsomal 3β-Hydroxysteroid Dehydrogenase Activity. William Gibb . . 2433 459

Novel Epimerization of Steroidal Allylic Alcohols. Makoto Mori, Shiro Ikegami, and Bun-ichi Tamaoki . . 2434 467

Estradiol 17β-Dehydrogenase and Estradiol Binding in Human Mammary Tumors. Y.J. Abul-Hajj, R. Iverson, and D.T. Kiang . . 2435 . . . 477

Photohydration of Testosterone and 4-Androstene-3,17-Dione in Aqueous Solution. Donald G. Cornell, Eliza Avram, and Nicolae Filipescu . . 2073 485

In vitro Metabolism of Testosterone by Cultured Sertoli Cells and the Effect of FSH. Robert K. Tcholakian and Anna Steinberger . 2359 . 495

Simultaneous Radioimmunoassay of Serum Testosterone and 5α-Dihydrotestosterone Without Chromatography. C. Dotti, A. Becchi, C. Castagnetti, B. Colla, and G. Filippi . . 2392 527

A Novel Fluorinated Derivative of Diethylstilbestrol. J.A. McLachlan, K. Baucom, K.S. Korach, L. Levy, and M. Metzler . . 2421 543

Antisera Reactive Directly to Estrone Sulfate. R.I. Cox, R.M. Hoskinson, and M.S.F. Wong . . 2425 549

Radioimmunoassay of 2-Hydroxyestrone and 2-Methoxyestrone in Human Urine. P. Ball, G. Reu, J. Schwab, and R. Knuppen . . 2431 . . . 563

Metabolism of Progesterone in the Pregnant Sheep Near Term: Identification of 3β-Hydroxy-5α-Pregnan-20-One 3-Sulfate as a Major Metabolite. Charles P.W. Tsang and A.J. Hackett . . 2432 577

Improved Synthesis of 5β-Cholestan-26-OIC Acids. A.K. Batta, G. Salen, G.S. Tint, and S. Shefer . . 2438 589

Determination of the Configuration of Epimeric Diols of Vitamin D_3 Series by Mass Spectrometry. Ze'ev V.I. Zaretskii . . 2442 . . . 595

Total Synthesis of Heterocyclic Steroids, Part I, Synthesis of (±)-A-Nor-3-Thiaestra-1,5(10)-Dien-17β-OL. P.S. Jogdeo and G.V. Bhide . . 2365 601

Synthesis of C-19 Deuterium Labelled Steroids. Robert L. Dyer and Terry A. Harrow . . 2416 617

The Source of Progesterone in Preimplantation Rabbit Blastocysts. Marlane J. Angle and Rodney A. Mead . . 2427 625

The Identification and Characterization of a New $C_{19}O_3$ Steroid Metabolite in the Rat Ventral Prostate: 5α-Androstane-3β,6α,17β-Triol. John T. Isaacs, Ian R. McDermott, and Donald S. Coffey . . 2428 . . 639

Reversible Interaction Between Androgen Binding Protein and Testicular Macromolecules Causing Inhibition of Androgen Binding Activity. F.F.G. Rommerts, B.Ch. Krüger, J.A. Grootegoed, and H.J. van der Molen . . 2429 659

Characterization of Two New Enzymatic Activities of the Rat Ventral Prostate: 5α-Androstane-3β,17β-Diol 6α-Hydroxylase and 5α-Androstane-3β,17β-Diol 7α-Hydroxylase. John T. Isaacs, Ian R. McDermott, and Donald S. Coffey . . 2436 675

Synthesis and Stereochemistry of C-3- and C-7-Linked (O-Carboxymethyl)-Oximino- and Hemisuccinamido Derivatives of 5α-Dihydrotestosterone. E. Mappus and Cl.Y. Cuilleron . . 2446 693

Volume 33 Tables of Content, Author Index, and Subject Index . . . 719